

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 12; December 2025; Page No. 922-924

Received: 09-10-2025

Accepted: 14-11-2025

Indexed Journal

Peer Reviewed Journal

Constraints faced by Block Technology Managers (BTMs) working under Centrally Sponsored Scheme Agricultural Technology Management Agency (CSS-ATMA) in Assam while performing their jobs

¹Surkunta Kiran Reddy and ²Prasanta Mishra

¹Teaching Associate, Department of Agricultural Extension, Agricultural College, PJTAU, Adilabad, Telangana, India

²Professor, Department of Agricultural Extension, AAU, Jorhat, Assam, India

DOI: <https://www.doi.org/10.33545/26180723.2025.v8.i12l.2931>

Corresponding Author: Surkunta Kiran Reddy

Abstract

The present study was undertaken to examine the constraints encountered by Block Technology Managers (BTMs) working under the Centrally Sponsored Scheme Agricultural Technology Management Agency (CSS-ATMA) in Assam during the discharge of their official duties. A purposive sampling technique was employed to select a sample of 60 BTMs for the study. The data collected through questionnaires sent through e-mails. The data were analysed using statistical tools as frequency, percentage, mean, standard deviation, coefficient of variation and rankings. The findings indicated that BTMs experienced several job-related problems that affected their work performance. The most critical constraint reported was the irregular release of funds for extension activities and delayed payment of monthly salaries to contractual staff, which ranked first with a frequency of 55 respondents (91.66%). This was followed by the Imbalance in present salary and present economic situation, ranked second with a frequency of 52 respondents (86.66%). Another major problem identified was the Irregular attendance of some BTT members, which ranked third with a frequency of 46 respondents (76.66%). The study underscores the need for timely intervention by higher authorities to address these constraints, which would enhance the work efficiency and overall job productivity of Block Technology Managers under ATMA in Assam

Keywords: Block Technology Managers (BTMs), Agricultural Technology Management Agency (ATMA), constraints, centrally sponsored scheme

Introduction

Agricultural extension plays a vital role in promoting agricultural development by facilitating the transfer of knowledge, technologies and innovations from research systems to farmers. Effective extension services enhance farmers' decision-making capacity, productivity and livelihoods (Swanson & Rajalahti, 2010) ^[9]. Recognizing the need for a decentralized, participatory and farmer-led extension approach, the Government of India launched the Agricultural Technology Management Agency (ATMA) as a Centrally Sponsored Scheme to reform the public extension system (Singh *et al.*, 2006) ^[8]. ATMA emphasizes convergence among line departments, research institutions, private agencies and farmer organizations to ensure demand-driven and location-specific extension delivery. At the grassroots level, Block Technology Managers (BTMs) function as key extension personnel responsible for planning, coordinating, and implementing extension activities at the block level. Their role includes mobilizing Farmer Interest Groups (FIGs), facilitating training and demonstrations, ensuring inter-departmental coordination, and acting as a vital link between farmers and extension institutions (Glendenning *et al.*, 2010) ^[3]. The effectiveness of ATMA largely depends on the competence, motivation, and working conditions of these frontline extension

workers. However, several studies have highlighted that extension personnel often face numerous constraints such as inadequate infrastructure, administrative delays, lack of incentives, role ambiguity and job insecurity, which adversely affect their performance (Kumar *et al.*, 2015; Singh & Meena, 2013) ^[5, 7]. These challenges tend to be more acute in states like Assam, where diverse agro-climatic conditions, dispersed settlements, poor connectivity and recurrent natural calamities pose additional obstacles to effective extension service delivery (Das & Borah, 2018) ^[11]. Despite the critical role played by BTMs in implementing ATMA, empirical evidence on the constraints faced by them, particularly in the context of Assam, remains limited. A systematic assessment of these constraints is essential for strengthening the extension system and improving service delivery. Therefore, the present study aims to analyze the constraints faced by Block Technology Managers working under ATMA in Assam while performing their assigned duties, with a view to suggesting appropriate policy and administrative interventions.

Materials and Methods

The present study was carried out in the state of Assam, which comprises 27 districts, of which 14 districts are implementing the Centrally Sponsored Scheme Agricultural

Technology Management Agency (ATMA). These 14 districts together encompass 114 blocks under CSS-ATMA. A judgmental (purposive) sampling technique was adopted for the selection of both the study area and the respondents. Although all 114 ATMA blocks were initially proposed to be included in the study, data collection through e-mail questionnaires limited the coverage to 95 blocks due to the non-availability of e-mail addresses of some Block Technology Managers (BTMs). A total of 66 BTMs were working in these 95 blocks. Structured questionnaires were administered electronically to all 66 BTMs and responses were received from each of them. However, only 60

questionnaires were found to be complete in all respects and were therefore considered for final analysis. Consequently, the effective sample size of the study was 60 respondents, representing 90.90 per cent of the total BTMs contacted. The collected data were analyzed using appropriate statistical tools such as frequency distribution, percentage, mean, standard deviation, coefficient of variation analysis and ranking of constraints based on their order of magnitude.

Results and Discussion

Profile characteristics of BTMs

Table 1: Distribution of Respondents According to Selected Characteristics

Sl. No.	Characteristic	N	Mean	Standard Deviation	Coefficient of Variation (%)
1	Age	60	32.66	5.14	15.74
2	Service experience	60	6.20	3.55	57.25
3	Perceived organizational support	60	20.61	5.84	28.33
4	Job involvement	60	20.61	3.31	16.06
5	Achievement motivation	60	20.41	4.44	21.75
6	Job satisfaction	60	14.60	6.50	44.52
7	Perceived work environment	60	12.73	4.04	31.73
8	Attitude towards extension work	60	23.01	9.05	39.33

In the present study, variables such as age, service experience, perceived organizational support, perceived work environment, job involvement, achievement motivation, attitude towards extension work, and job satisfaction were considered as independent variables. These variables were measured using standardized scales developed by various researchers over time. The profile characteristics of the Block Technology Managers (BTMs) in the study area are presented in Table 1.

The results indicate that the BTMs had a mean age of 32.66 years with a standard deviation of 5.14 and a coefficient of variation of 15.74, suggesting that the majority of the respondents belonged to the middle-age group. Service experience recorded a mean value of 6.20 years with a standard deviation of 3.55 and a coefficient of variation of 57.25, indicating that most of the BTMs possessed a moderate level of service experience. Perceived organizational support, assessed using the scale developed

by Eisenberger *et al.* (1986) ^[2], showed a mean score of 20.61 and a standard deviation of 5.84, reflecting a moderate perception of organizational support among the respondents.

Job involvement, measured using the scale developed by Lodahl and Kejner (1965) ^[6], had a mean score of 20.61 with a standard deviation of 3.31 and a coefficient of variation of 16.06, indicating a relatively consistent level of involvement in their work. Achievement motivation, assessed using the scale developed by Gogoi (1987) ^[4], recorded a mean score of 20.41 with a standard deviation of 4.44 and a coefficient of variation of 21.75, suggesting a moderate level of achievement motivation among the BTMs. Job satisfaction, measured through the scale developed by Wanous and Lawler (1972), had a mean score of 14.60 with a standard deviation of 6.50 and a coefficient of variation of 44.52, indicating considerable variability in the level of job satisfaction among the respondents.

Table 2: Problems reported by the Block Technology Managers (BTMs) in performing their assigned jobs

Sl. No.	Problems	Frequency	Percentage (%)	Rank/Grade
1	Irregularity in release of funds for activities and monthly salary of contractual staff	55	91.66	I
2	Imbalance between present salary and prevailing economic situation	52	86.66	II
3	Irregular attendance of some Block Technology Team (BTT) members	46	76.66	III
4	Irregular attendance of Farmer Advisory Committee (FAC) members	44	73.33	IV
5	Frequent non-cooperation between contractual staff of ATMA and conveners	42	70.00	V
6	Non-availability of incentives, rewards, etc. for contractual staff	35	58.33	VI
7	Fear of job termination among contractual staff	33	55.00	VII

The Table 2. reveals that five problems were really serious as 70.00 per cent and more of the respondents faced them. Within these problems “irregularity in release of funds for activities and monthly salary of contractual staff” was rated first with 91.66 per cents agreeing to it. This is an indication for un-comfort levels of Block Technology Managers (BTM) in performing their assigned jobs. The money value in India is decreasing day by day, so the salaries of the

employers should also grow in same proposition with the increasing price. But the BTMs are feeling that they are not getting the salaries which they deserve. Therefore the problem “imbalance in present salary and present economic situation” (86.66%) of BTM ranked second.

The BTMs usually faces the problems because of some Block Technology Team (BTT) members also. The BTM also need to work with the BTT members to carry on their

activities. But some BTT members are very irregular with their attendance by which the BTMs face some problems in carrying out some activities. So BTMs found the problem like “irregular attendance of some BTT members” (76.66%) third serious problem and the problem “irregular attendance of FAC members” found to be as fourth serious problem” (73.33%). The problem “frequent non-co-operation between contractual staff of ATMA and the conveners” (70.00%) found as fifth major problem among all, as the BTM usually faces the problem of co-operation and co-ordination between the contractual staff and the conveners, which affects the overall productivity of BTMs and the ATMA.

The availability of incentives in any department will encourage the employer to do his work with new enthusiasm and new energy. But non availability of the incentives to contractual staff will lead to decrease in their job productivity. So the BTMs found the problem “non availability of the incentives to contractual staff (58.33%)” as their sixth major problem among all. There are regular and contractual staffs in the ATMA. But when contractual employee does a mistake, any same level permanent staff member can dismiss the contractual staff member by showing a particular reason. So the problem “Fear of contractual staff regarding job termination” (55.00%) found as the seventh and last major problem by the BTMs.

Based on the responses given by the respondents (BTMs), first five problems have been recognized as most serious which were expressed by 70.00 per cent and above 70.00 per cent of the respondents, next two problems considered as somewhat serious problems as those were expressed by 50.00 to 60.00 per cent of the respondents.

Conclusion

The study reveals that Block Technology Managers (BTMs) under ATMA in Assam face several critical constraints, with irregular fund release and delayed salaries emerging as the most severe problems. Inadequate remuneration, lack of incentives and fear of job insecurity further contribute to low motivation among BTMs. Organizational issues such as irregular participation of BTT and FAC members and poor coordination also hinder effective implementation of extension activities. Addressing these financial, administrative, and coordination-related constraints is essential to enhance the efficiency and job performance of BTMs and to strengthen the overall functioning of ATMA in the state.

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